

**AMENDMENTS TO THE ABSTRACT:**

Please amend the Abstract as follows:

**ABSTRACT OF THE DISCLOSURE**

~~\_\_\_\_\_The invention considers a plurality of receiving nodes (120-1, 120-2 and 120-3)~~  
~~such as base stations in a wireless network. Each receiving node (120) of a plurality of~~  
~~receiving nodes (120-1, 120-2 and 120-3) such as base stations in a wireless network~~  
converts a superposition of signals received from a plurality of transmitting nodes such as  
mobile terminals (10) to produce soft complex signal information. ~~A basic idea according~~  
~~to the invention is to collect t~~The soft complex signal information associated with the  
considered plurality of receiving nodes are collected, for example in a central node (130)  
and jointly detect signal information transmitted from at least a subset of the plurality of  
transmitting nodes (10) based on the collected soft complex signal information. The  
collected soft signal information generally retains phase and amplitude information, and  
the transmitted signals are preferably detected in a joint detection process based on a  
complex channel representation and collected soft signal information. In a truly  
distributed realization, adjacent receiving nodes or base stations exchange soft complex  
signal information with each other, thus forming at least partially overlapping groups for  
distributed collection of information, detection and subsequent decoding in each base  
station.